

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-20. Cancelled.

21. (Previously Presented) A method of forming a doped active area in a semiconductor substrate, comprising:

forming first and second insulation areas on a surface of the substrate, the first and second insulation areas being spaced apart from each other and thereby defining a substrate region of the substrate between the first and second insulation areas, the substrate region having a first peripheral portion immediately adjacent to the first insulation area and a central portion spaced apart from the first insulation area;

forming a spacer adjacent to the first insulation area and above the first peripheral portion of the substrate region;

performing, with the spacer positioned above the substrate, a high-energy first implant of first dopant type into the substrate region to create a well that extends in the substrate at a bottom side of the first insulation area; and

performing, with the spacer positioned above the substrate, a low-energy second implant of the first dopant type into the substrate region to create the doped active area, the spacer acting as a mask to allow dopants of the second implant to extend deeper into the central portion than into the first peripheral portion.

22. (Previously Presented) The method of claim 21, further comprising forming a conductive gate on the active area after performing the first and second implants

without implanting any dopants of other than the first dopant type in the active area prior to forming the conductive gate.

23. (Cancelled)

24. (Previously Presented) The method of claim 21, further comprising planarizing top surfaces of the insulating areas after performing the second implant.